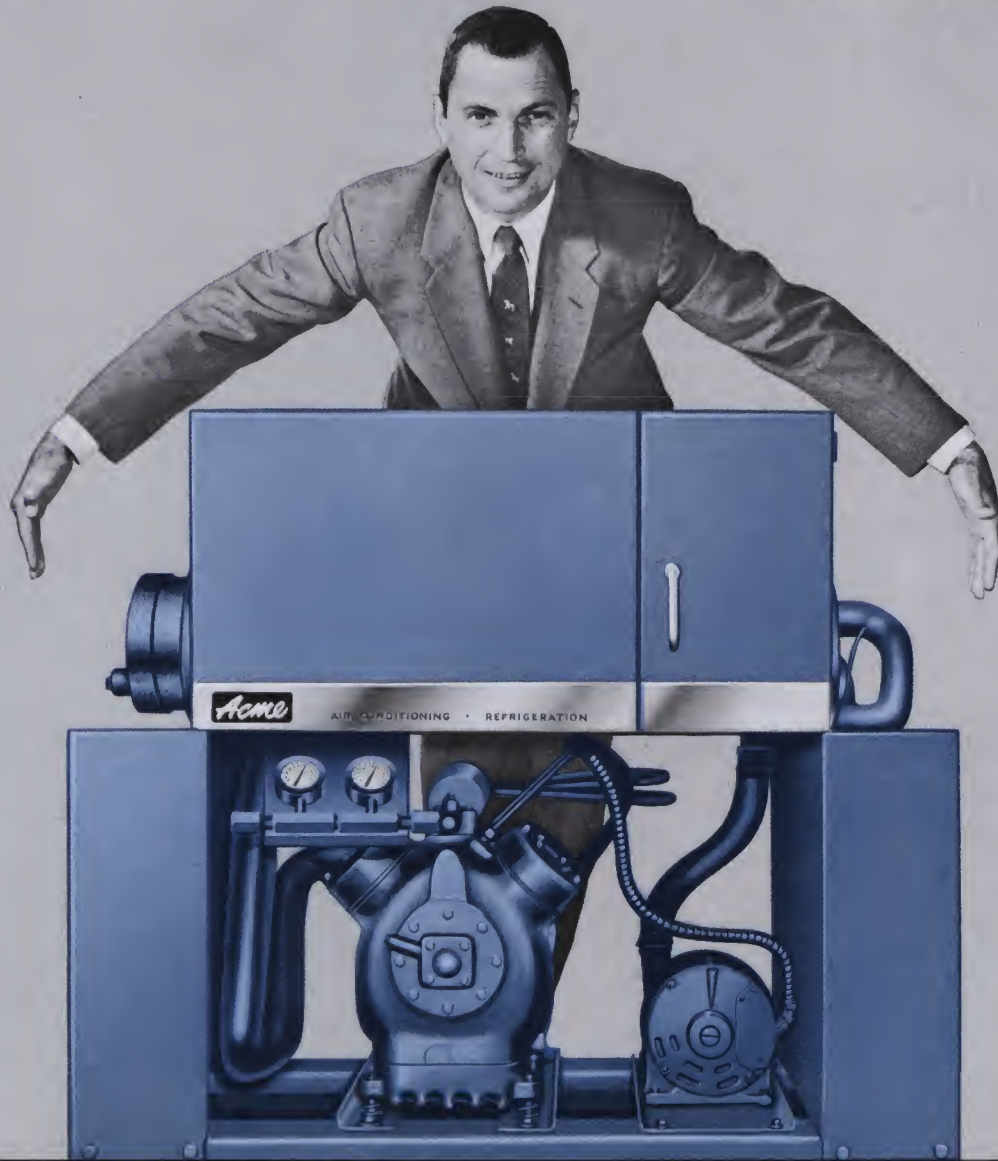


Acme **FLOW COLD**®

PACKAGED WATER CHILLERS MODEL RG



**GIVE YOU THE MOST COMPACT, DEPENDABLE PACKAGED CHILLER
FOR AIR CONDITIONING AND PROCESS COOLING**

- * Lighter, easier to install
- * Higher efficiency from matched components
- * Extremely quiet
- * Complete, ready to install
- * Performance Certified
- * 8 Models, 3 through 30 tons

GET LOWER COST COOLING WITH *Acme* MODEL RG PACKAGED WATER CHILLERS

Here is an entirely new high performance packaged chiller which packs more capacity into a smaller package than has ever been possible before. Now you can have the simplicity of a completely factory assembled package, the ruggedness for which Acme equipment has always been known and the smooth, quiet performance that you have always wanted . . . all wrapped up in a smaller, lighter, lower cost package.

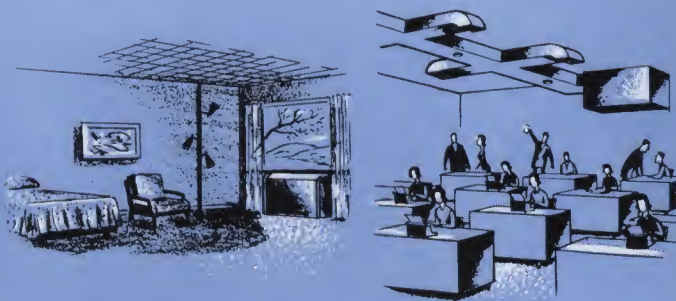
Heart of this great new Acme packaged water chiller is a greatly improved Acme Dry-Ex Cooler. Acme introduced a new standard in the design of high efficiency coolers in 1937 with the introduction of the Dry-Ex, first direct expansion cooler on the market. Improvement since that time has been continuous and the new Dry-Ex Cooler used on the Acme Model RG Packaged Water Chiller packs more heat transfer capacity into less space than ever before.

The smaller size and lighter weight of these units give you many advantages. You use less floor space and less headroom. Floor loadings are significantly reduced giving you more freedom in the placement of the unit and cutting building costs. Installation is easier and less costly because the unit is light and easy to handle and passes through doors and other tight places without trouble. Reduction in unit size has also meant a reduction in cost. Yet none of these advantages has been gained at the expense of reliability. Every Acme Packaged Chiller is tested at the factory under operating conditions and is certified to meet specifications for performance.

There are many other reasons why Acme Flow Cold Packaged Water Chillers will do a better job for you. The compressor, cooler, condenser, controls and all other components are accurately matched at the factory and assembled into a complete package, including all internal piping and control wiring and the operating charge of refrigerant. All you need to do is attach piping and power. Acme Packaged Chillers are exceptionally quiet and stay quiet through the years.

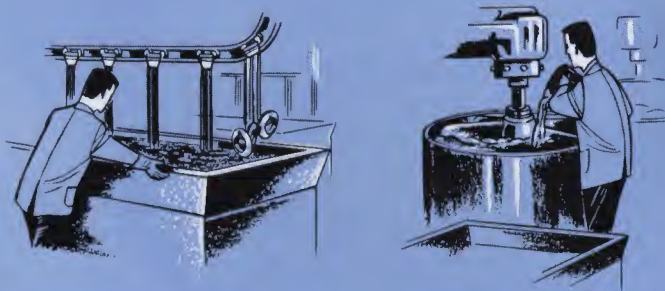
Every Acme product is backed by the name and reputation of Acme Industries, builders of quality air conditioning and refrigeration equipment since 1919. Every major manufacturer of air conditioning equipment has been using one or more Acme designed and built components for many years.

FOR AIR CONDITIONING



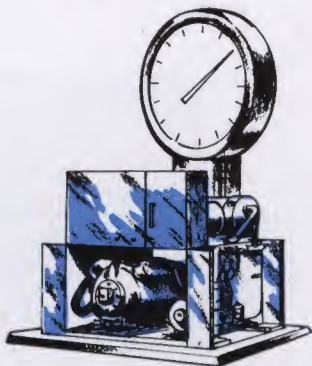
Acme Model RG Flow Cold Packaged Water Chillers are designed particularly for use in all chilled water types of air conditioning systems. The chilled water can be used in a central air handling unit, in individual room fan-and-coil units, in remote floor and ceiling mounted air handling units or in any other type of system utilizing chilled water. The chiller may be tied in with a boiler or other hot water source to provide heating and cooling in the same distribution system. Although most chillers are normally located in basement equipment rooms, the Acme Model RG, because of its lighter weight and smooth, quiet operation, may be located anywhere in the building and may be used as a chilled water source in zoned systems having a number of separate chillers.

FOR PROCESS COOLING



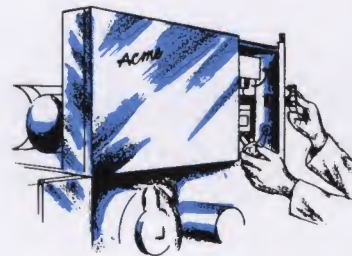
The Model RG Chiller will handle all types of industrial and process cooling applications utilizing chilled water within its capacity and temperature range. Typical applications include the cooling of cutting and quenching oils, plating and anodizing solutions with chilled water coils, as well as water cooling of welding machine tips, die casting and injection molding machines and many other industrial processes which require the removal of heat generated during the manufacturing operation. Acme Packaged Chillers also are used extensively to provide chilled water for temperature control in the processing of chemicals, drugs, medicines, petroleum products, food and a host of other products.

**SMALL SIZE, LIGHT WEIGHT,
LOW COST**



The new Acme Dry-Ex Cooler, the heart of the Model RG Packaged Chiller, has more capacity in a smaller shell than ever before. This has made it possible to reduce length of the unit by as much as 38%, height by as much as 23%, cubage by as much as 51%. Weight has been reduced as much as 40%. Advantages to the user, to the engineer, and to the installer of this advance in packaged chiller design and construction are many, including less space needed, easier handling and installation and less support required.

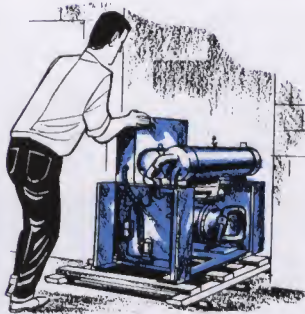
**CONVENIENT,
PROTECTED CONTROLS**



All controls are conveniently mounted in an enclosed metal cabinet where they are safe from dirt and breakage. Tampering with control settings by unauthorized persons can be prevented simply by locking the handle of the control box. All necessary operating and protective controls are provided, including compressor and pump starters, freeze-up thermostat, temperature control and dual pressure control. The power supply terminal block has built-in provision for tying-in related equipment such as a cooling tower or evaporative condenser. All controls and enclosures conform to applicable codes.

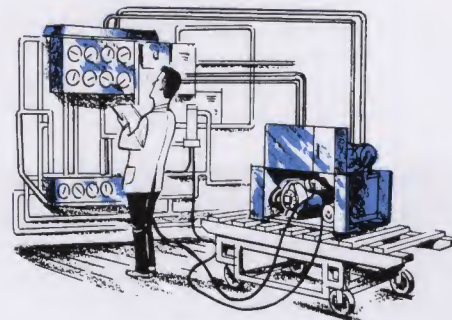
**EXCLUSIVE FEATURES LIKE THESE MAKE
Acme YOUR BEST PACKAGED WATER CHILLER BUY**

EASY INSTALLATION



Acme Packaged Chillers are shipped complete, ready to install and operate. Just connect external cooler and condenser piping, add power and the unit is ready to go. All internal wiring and piping is completed. The circulating pump is furnished as standard, wired and piped. The system is charged and the controls are adjusted. The terminal block on the control panel contains built-in provision for tying-in auxiliary equipment such as a cooling tower or evaporative condenser. The reduced size and weight of the new Acme Packaged Chiller make it easier to install, too, because the new unit is easier to handle and move through tight places. All parts of the unit are easily accessible for maintenance and service.

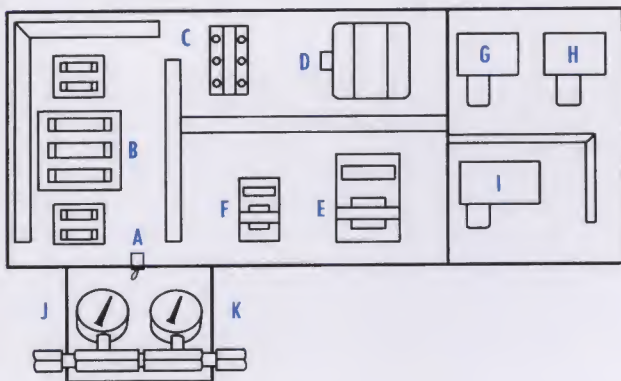
FACTORY CERTIFIED PERFORMANCE



In addition to the procedures for fabrication and testing in accordance with code requirements, and careful quality control, Acme tests each packaged chiller under actual operating conditions prior to shipment. Performance data is recorded on a battery of modern testing instruments and permanently recorded in a test log book. Acme provides a positive guarantee of performance by issuing a certificate for each unit confirming that the unit has been tested and found to meet the requirements of the specified operating conditions. This is just one more assurance that the chiller you get from Acme will perform as specified and will continue to perform for years to come.

Acme**FLOW-COLD PACKAGED WATER CHILLERS****MODEL RG CONSTRUCTION DETAILS****CONTROL PANEL**

Completely wired at factory incorporating all operating, limit, and safety controls.



- A. Circulating pump switch
- B. Transformer, compressor and pump fusing
- C. Power supply terminal block
- D. Control circuit transformer
- E. Compressor motor starter

- F. Pump motor starter
- G. High pressure control
- H. Water temperature control
- I. Low pressure safety control
- J. Suction pressure gauge
- K. Discharge pressure gauge

COMPRESSOR

Accessible hermetic type motor-compressor unit is statically and dynamically balanced for smooth, quiet operation. Complete with crankcase oil sight glass and forced feed lubrication.

CIRCULATING PUMP

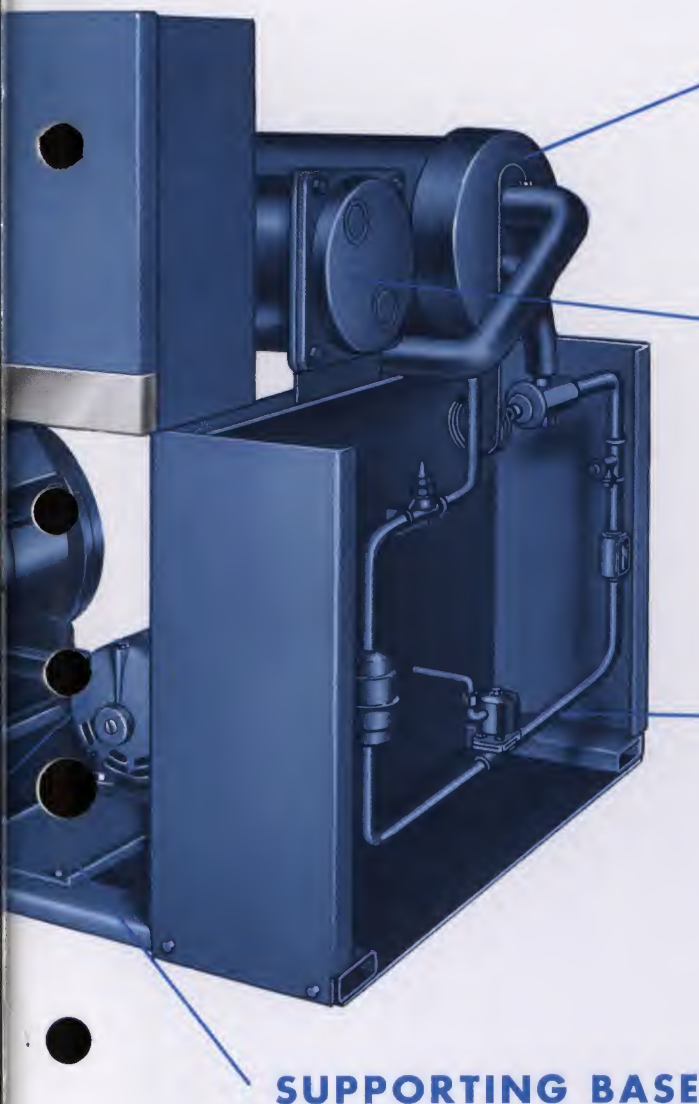
Centrifugal, close-coupled, bronze-fitted, mechanical seal type with drip-proof motor and non-overloading impellers. Galvanized iron pipe between the pump discharge and the cooler inlet is installed and insulated at the factory.

**THE FLOW-COLD PACKAGED WATER CHILLER**

Acme Flow-Cold Model RG Packaged Water Chillers are the operating heart of a complete air conditioning or process cooling system. Acme furnishes a complete line of related equipment, all carefully matched in operating characteristics to produce the most economical and reliable complete system possible. Your Acme sales engineer is well equipped by experience and training to assist you in the solution of all your air conditioning and process cooling problems. He will be glad to help you at any time; without obligation, of course.



WATER SAVING EQUIPMENT — Matching compact and efficient cooling towers and evaporative condensers, for indoor or outdoor installation, are engineered to reduce system operating costs by re-using 97% of the condensing water.

MODEL RG CONSTRUCTION DETAILS**COOLER**

Acme thru-tube Dry-Ex Cooler with steel shell and copper tubes having positive leakproof tube-to-steel tube sheet joints and gasketless steel heads. Baffles and spacing rods are of rust and corrosion-proof material. Entire unit insulated with closed-cell foamed plastic. Constructed and tested to meet Underwriter's Laboratory or ASME code requirements.

CONDENSER

Acme cleanable thru-tube condenser with steel shell and integral finned copper tubes having positive leakproof tube-to-steel tube sheet joints and removable cast iron heads. Unit has full system pump-down capacity and is complete with relief and purge valves. Constructed and tested to meet Underwriter's Laboratory or ASME code requirements. Unit also is available without condenser for use with air-cooled or evaporative condensers.

REFRIGERANT CIRCUIT

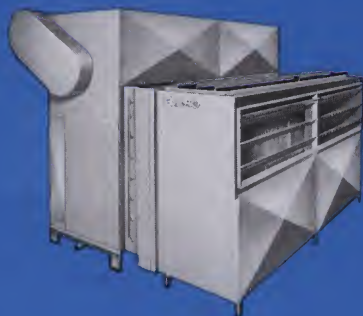
The refrigerant circuit is completely factory assembled and ready for operation and includes muffler, heat exchanger, solenoid valve, thermal expansion valve, filter-drier, moisture indicator, sight glass, and refrigerant charging and liquid line shut-off valve.

Models RG-3 thru RG-10 are single circuit. Models RG-15 thru RG-30 are dual circuit with two compressors, coolers and condensers and provide system capacity modulation.

All units are complete with operating charge of R-22.

SUPPORTING BASE

Unit factory assembled on rigid, steel structural frame members.

IS THE HEART OF THE *Acme* SYSTEM

AIR HANDLING EQUIPMENT—Completely flexible central air handling units provide clean, conditioned air to the conditioned space from your choice of unit location. Heating or cooling, or both simultaneously, from the same unit.

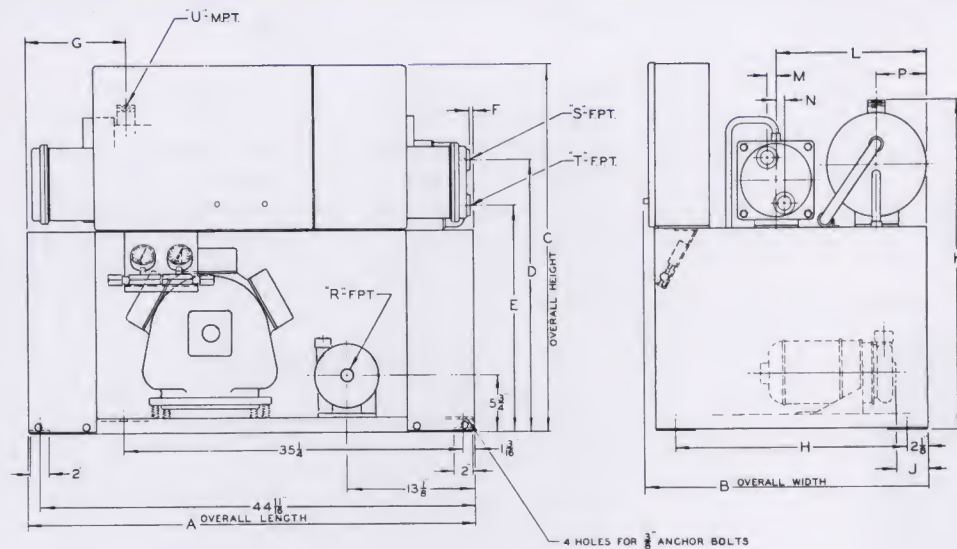


REMOTE ROOM UNITS—Extremely quiet and attractive fan-coil units for individual room control of filtered and conditioned air. Same units may be used for both heating and cooling.

Acme

FLOW COLD PACKAGED WATER CHILLERS

MODEL RG GENERAL SPECIFICATIONS



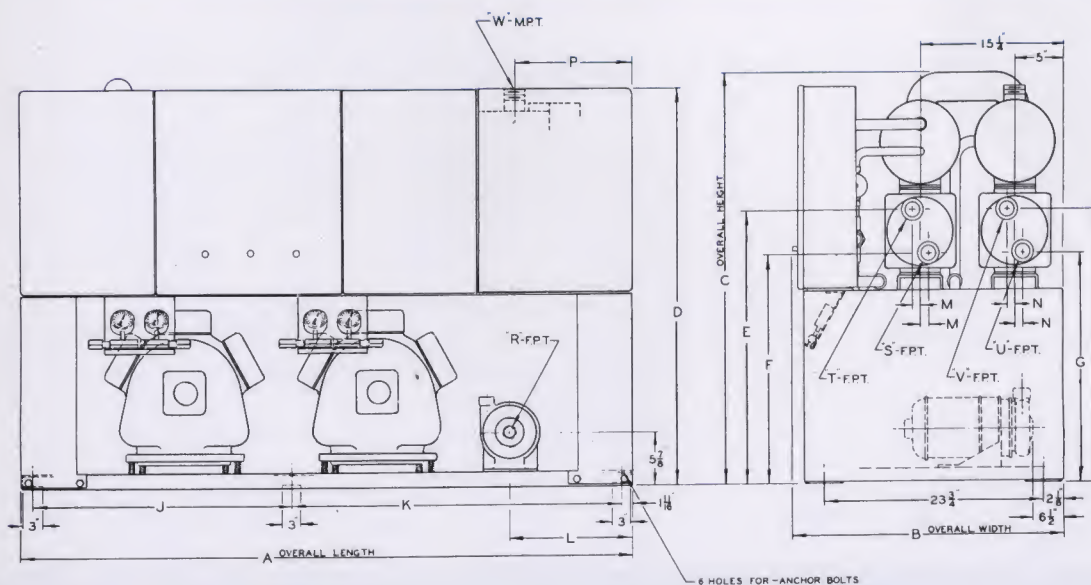
MODEL	A	B	C	D	E
RG-3	46	24 $\frac{1}{8}$	35 $\frac{1}{4}$	26 $\frac{1}{2}$	22
RG-5	46	24 $\frac{1}{8}$	35 $\frac{1}{4}$	26 $\frac{1}{2}$	21
RG-8	46	26 $\frac{1}{8}$	36 $\frac{1}{4}$	26 $\frac{1}{2}$	22
RG-10	46	29 $\frac{1}{8}$	36 $\frac{1}{4}$	26 $\frac{1}{2}$	22 $\frac{1}{8}$

MODEL	F	G	H	J	K
RG-3	$\frac{1}{16}$	17 $\frac{1}{16}$	17 $\frac{3}{4}$	6 $\frac{1}{4}$	28 $\frac{3}{8}$
RG-5	$\frac{1}{16}$	5 $\frac{1}{16}$	17 $\frac{3}{4}$	6 $\frac{1}{4}$	28 $\frac{7}{16}$
RG-8	$\frac{1}{16}$	4 $\frac{7}{16}$	20 $\frac{3}{4}$	8 $\frac{1}{16}$	31
RG-10	$\frac{1}{16}$	10 $\frac{7}{16}$	23 $\frac{3}{4}$	7 $\frac{1}{2}$	32 $\frac{3}{8}$

MODEL	L	M	N	P	R
RG-3	12 $\frac{1}{8}$	0	0	3 $\frac{3}{8}$	1 $\frac{1}{4}$
RG-5	12 $\frac{1}{8}$	0	0	3 $\frac{3}{8}$	1 $\frac{1}{4}$
RG-8	13 $\frac{1}{8}$	0	0	4 $\frac{1}{4}$	1 $\frac{1}{4}$
RG-10	15 $\frac{1}{16}$	$\frac{3}{8}$	$\frac{3}{8}$	5 $\frac{1}{8}$	1 $\frac{1}{4}$

MODEL	S	T	U
RG-3	1	1	1
RG-5	1	1	1 $\frac{1}{4}$
RG-8	1	1	1 $\frac{1}{2}$
RG-10	1 $\frac{1}{4}$	1 $\frac{1}{4}$	1 $\frac{1}{2}$

ALL DIMENSIONS ARE IN INCHES



MODEL	A	B	C	D	E
RG-15	67	30 $\frac{1}{8}$	43 $\frac{3}{8}$	40 $\frac{1}{8}$	28
RG-20	67	30 $\frac{1}{8}$	44 $\frac{1}{8}$	40 $\frac{1}{8}$	28 $\frac{1}{4}$
RG-25	70	29 $\frac{1}{8}$	46 $\frac{1}{8}$	43 $\frac{3}{8}$	28 $\frac{1}{4}$
RG-30	70	29 $\frac{1}{8}$	46 $\frac{1}{8}$	43 $\frac{3}{8}$	28 $\frac{1}{8}$

MODEL	F	G	H	J	K
RG-15	23 $\frac{1}{2}$	23 $\frac{1}{2}$	28	28	35 $\frac{1}{16}$
RG-20	23 $\frac{3}{4}$	23 $\frac{3}{4}$	28 $\frac{1}{4}$	28	35 $\frac{1}{16}$
RG-25	23 $\frac{3}{4}$	23 $\frac{11}{16}$	28 $\frac{3}{8}$	26 $\frac{1}{8}$	40 $\frac{1}{4}$
RG-30	23 $\frac{11}{16}$	23 $\frac{11}{16}$	28 $\frac{3}{8}$	26 $\frac{1}{8}$	40 $\frac{1}{4}$

MODEL	L	M	N	P	R
RG-15	9 $\frac{3}{4}$	0	0	24 $\frac{1}{4}$	1 $\frac{1}{2}$
RG-20	9 $\frac{3}{4}$	$\frac{3}{8}$	$\frac{3}{8}$	13 $\frac{3}{8}$	1 $\frac{1}{2}$
RG-25	13 $\frac{3}{4}$	$\frac{3}{8}$	0	16 $\frac{1}{8}$	1 $\frac{1}{2}$
RG-30	13 $\frac{3}{4}$	0	0	16 $\frac{1}{8}$	1 $\frac{1}{2}$

MODEL	S	T	U	V	W
RG-15	1	1	1	1	1 $\frac{1}{2}$
RG-20	1 $\frac{1}{4}$	1 $\frac{1}{4}$	1 $\frac{1}{4}$	1 $\frac{1}{4}$	2
RG-25	1 $\frac{1}{4}$	1 $\frac{1}{4}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	2 $\frac{1}{2}$
RG-30	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	2 $\frac{1}{2}$

ALL DIMENSIONS ARE IN INCHES

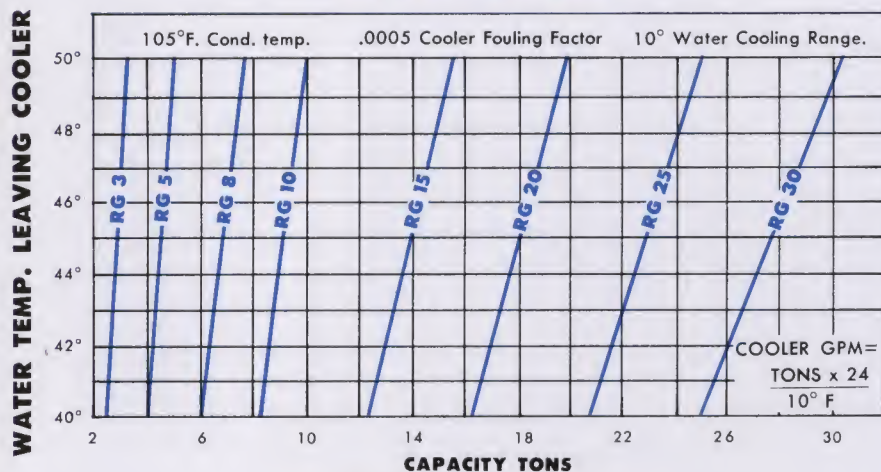
MODEL NO.	HORSEPOWER		OVERALL INCHES			CHILLED WATER		CONDENSER		REFRIG. CHARGE LBS.	OPERATING WEIGHT	APPROX. SHIPPING WEIGHT
	COMP.	PUMP	W	L	H	IN	OUT	IN	OUT			
RG 3	3	$\frac{1}{3}$	24 $\frac{1}{8}$	46	35 $\frac{1}{4}$	1 $\frac{1}{4}$	1	1	1	5	590	560
RG 5	5	$\frac{1}{3}$	24 $\frac{1}{8}$	46	35 $\frac{1}{4}$	1 $\frac{1}{4}$	1 $\frac{1}{4}$	1	1	8	670	635
RG 8	7 $\frac{1}{2}$	$\frac{1}{2}$	27 $\frac{1}{8}$	46	36 $\frac{1}{4}$	1 $\frac{1}{4}$	1 $\frac{1}{2}$	1	1	13	775	735
RG 10	10	$\frac{1}{2}$	30 $\frac{1}{8}$	46	36 $\frac{1}{4}$	1 $\frac{1}{4}$	1 $\frac{1}{2}$	1 $\frac{1}{4}$	1 $\frac{1}{4}$	15	865	820
RG 15	7 $\frac{1}{2}$ (2)	$\frac{3}{4}$	30 $\frac{1}{8}$	67	43 $\frac{7}{8}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1	1	*26	1400	1350
RG 20	10 (2)	1 $\frac{1}{2}$	30 $\frac{1}{8}$	67	44 $\frac{7}{8}$	1 $\frac{1}{2}$	2	1 $\frac{1}{4}$	1 $\frac{1}{4}$	*30	1585	1530
RG 25	10 (1) 15 (1)	2	30 $\frac{1}{8}$	70	46 $\frac{5}{8}$	1 $\frac{1}{2}$	2 $\frac{1}{2}$	1 $\frac{1}{4}$ 1 $\frac{1}{2}$	1 $\frac{1}{4}$ 1 $\frac{1}{2}$	**39	1760	1700
RG 30	15 (2)	2	30 $\frac{1}{8}$	70	46 $\frac{5}{8}$	1 $\frac{1}{2}$	2 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	*48	1905	1840

*2 equal circuits— $\frac{1}{2}$ of listed refrigerant per circuit.

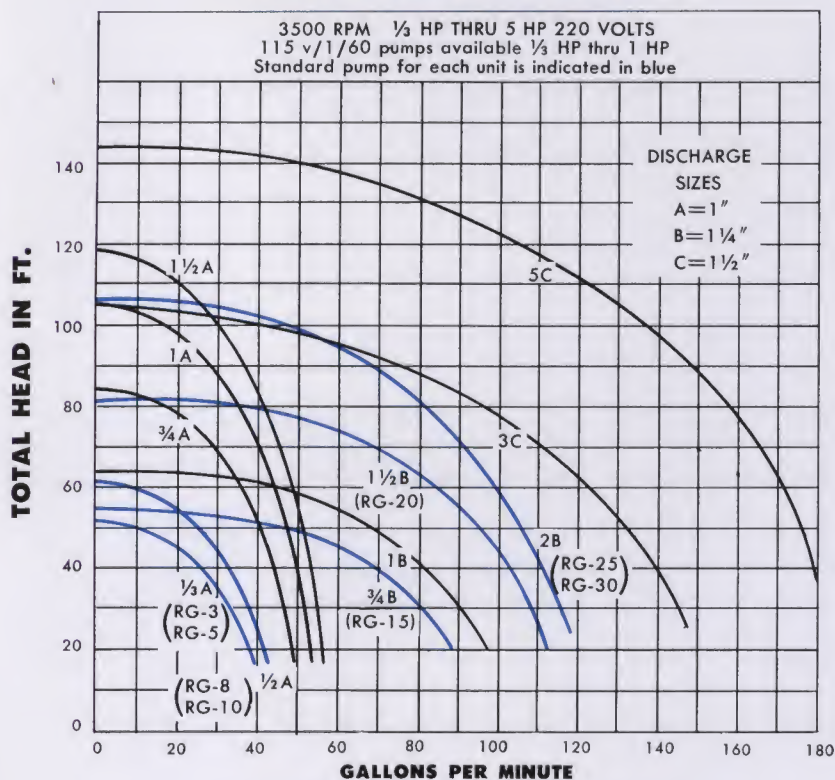
**2 unequal circuits—15# refrigerant in 10-ton circuit, 24# refrigerant in 15-ton circuit.

MODEL RG CAPACITY DATA

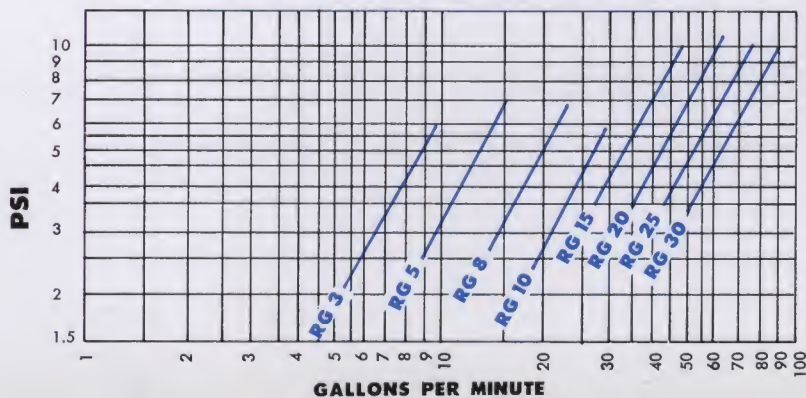
CAPACITY RATINGS



CHILLED WATER PUMP DATA



COOLER WATER PRESSURE DROP



CONDENSER PERFORMANCE

GPM	RG-3		RG-5		RG-8	
	GPM	PD	GPM	PD	GPM	PD
0.6	2.5	0.3				
0.8	3.5	0.45				
1.0	4.8	0.7	3.4	0.6		
1.2	6.2	1.1	4.2	0.8		
1.4	7.8	1.6	5.2	1.1		
1.6	9.6	2.4	6.1	1.6		
1.8	11.7	3.4	7.2	1.9		
2.0			8.3	2.5	7.6	1.1
2.5			11.9	4.5	10.3	2.0
3.0			16.3	8.0	13.5	3.3
3.5					17.2	5.2
4.0					21.5	7.8
4.5					26.3	11.3

GPM	RG-10		RG-15		RG-20	
	GPM	PD	GPM	PD	GPM	PD
2	7.5	0.6				
3	11.8	1.3	10.8	0.6		
4	17.0	2.4	15.2	1.1	15.0	0.6
5	23.5	4.3	20.6	2.0	19.4	0.9
6	32.0	7.6	27.0	3.3	23.6	1.3
8			43.0	7.8	34.0	2.4
9			52.6	11.3	40.0	3.2
10					47.0	4.3
12					64.0	7.6

GPM	RG-25		RG-30	
	GPM	PD	GPM	PD
7	28.0	1.1		
8	33.0	1.5	32	1.0
9	38.5	2.0	37.5	1.3
10	44.7	2.6	43.0	1.7
11	52.0	3.5	49.5	2.3
12	60.0	4.6	56.5	3.0
13	69.0	5.9	64.5	3.8
14	78.0	7.4	73.0	4.8
15			82.0	5.9
16			91.6	7.3
17				
18				

NOTE—Condenser water pressure drop (P.D.) is shown in PSI. Multiply by 2.31 to obtain feet of head. Do not extrapolate table values. Maximum GPM shown is for maximum recommended velocity of 8 feet per second.

GPM FACTOR =

$\frac{\text{Tons of Refrigeration} \times 10}{\text{Condensing Temperature} - \text{Entering Water Temperature}}$

NOTE: Chilled water pressure drop in PSI
Feet head = 2.31 x PSI

MODEL RG ENGINEERING SPECIFICATIONS

Contractor shall furnish and install where shown on the plans Acme Packaged Water Chiller(s) Model The unit(s) shall have a refrigeration capacity of tons when cooling GPM of water from degrees F to degrees F when supplied with GPM of condensing water at degrees F. Pressure drop shall not exceed PSI through the cooler and PSI through the condenser. The unit shall not exceed inches in length, inches in width, and inches in height.

The unit shall be a standard production factory-assembled model and shall be given a complete factory operating and control sequence test under full load conditions and shall be shipped with an operating refrigerant and oil charge. The unit shall include the following:

1. COMPRESSOR—shall be accessible hermetic motor-compressor unit with rotating parts statically and dynamically balanced, full pressure lubrication, suction and oil strainers, and sight glass for visual oil level check.

2. COOLER—shall be thru-tube direct expansion type with refrigerant in the tubes and water to be cooled within the shell. The cooler is to be factory insulated with closed-cell foamed plastic and is to be constructed and tested in accordance with Underwriter's Laboratory or ASME code requirements.

3. CONDENSER—shall be cleanable thru-tube type with steel shell and integral finned copper tubes. The condenser is to have sufficient volume to store the complete refrigerant charge and is to be complete with relief and purge valves. It is to be constructed and tested in accordance with Underwriter's Laboratory or ASME code requirements.

4. CONTROL PANEL BOX—shall be a single compartmented steel enclosure mounted on the unit containing all electrical controls. Control circuit transformer, pump motor starter, compressor motor starter(s), fusetrone box, and power supply terminal block shall be located in one compartment. A low pressure safety control, operating thermostat, and high pressure controller shall be furnished in other separate compartments, one for each refrigerant circuit.

A start-stop toggle switch shall be mounted outside the control enclosure. All controls and starters shall be completely factory-wired and adjusted and in accordance with applicable code requirements.

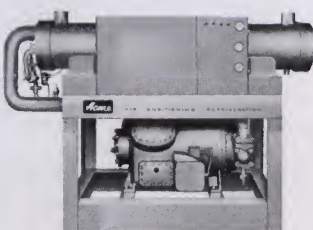
5. REFRIGERANT CIRCUIT—shall be complete with thermostatic expansion valve, liquid line solenoid valve, sight glass and moisture indicator, filter-drier, relief valve, purge valve, charging and liquid line shut-off valve, discharge gas muffler, heat exchanger and suction and discharge pressure gauges for each refrigerant circuit.

6. CHILLED WATER PUMP—shall be a centrifugal type pump of close-coupled, bronze-fitted construction with drip-proof motor, enclosed impeller and mechanical seal and shall be factory-mounted complete with insulated pump discharge to cooler inlet piping. Pump shall have a capacity of GPM at feet head.

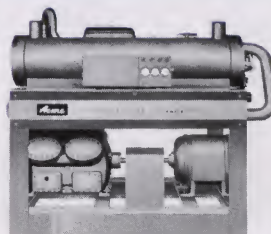
7. FRAME—All component parts of the unit shall be factory-assembled on a single structural steel frame consisting of 11 gauge steel bulkheads mounted on 7 gauge supporting channel.

Packaged water chillers with nominal capacity ratings of 3, 5, 7½ and 10 tons shall be of the single circuit type with one compressor, one cooler and one condenser. Units with nominal capacities of 15, 20, 25 and 30 tons shall be of the dual circuit type with two compressors, two coolers and two condensers.

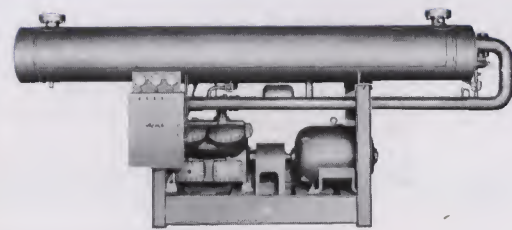
FOR LARGER TONNAGE PACKAGED CHILLERS, SPECIFY *Acme*



MODEL HE
Packaged Water Chiller
20 THRU 60 TONS



MODEL DE
Packaged Water Chiller
20 THRU 125 TONS



MODEL DD
Packaged Liquid Chiller
20 THRU 125 TONS

Acme

INDUSTRIES, INC.
JACKSON, MICHIGAN

MANUFACTURERS OF QUALITY AIR CONDITIONING & REFRIGERATION EQUIPMENT SINCE 1919.

Specifications subject to change without notice.

recommended by

Acme

FLOW-COLD PACKAGED WATER CHILLERS

MODEL RG ENGINEERING SPECIFICATIONS

Contractor shall furnish and install where shown on the plans Acme Packaged Water Chiller(s) Model The unit(s) shall have a refrigeration capacity of tons when cooling GPM of water from degrees F to degrees F when supplied with GPM of condensing shall

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4. **CONTROL PANEL BOX**—shall be a single compartmented steel enclosure mounted on the unit containing all electrical controls. Control circuit transformer, pump motor starter, compressor motor starter(s), fusetron box, and power supply terminal block shall be located in one compartment. A low pressure safety control, operating thermostat, and high pressure controller shall be furnished in other separate com-

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MODEL HE
Packaged Water Chiller
20 THRU 60 TONS

MODEL DE
Packaged Water Chiller
20 THRU 125 TONS

MODEL DD
Packaged Liquid Chiller
20 THRU 125 TONS

Acme

INDUSTRIES, INC.
JACKSON, MICHIGAN

MANUFACTURERS OF QUALITY AIR CONDITIONING & REFRIGERATION EQUIPMENT SINCE 1919.

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